Fig. 1

ANTIFUNGAL ACTIVITY OF Labda-8(17),12-diene-15,16-dial (AD-1) AGAINST Cladosporium cucumerinum AT DIFFERENT CONCENTRATIONS

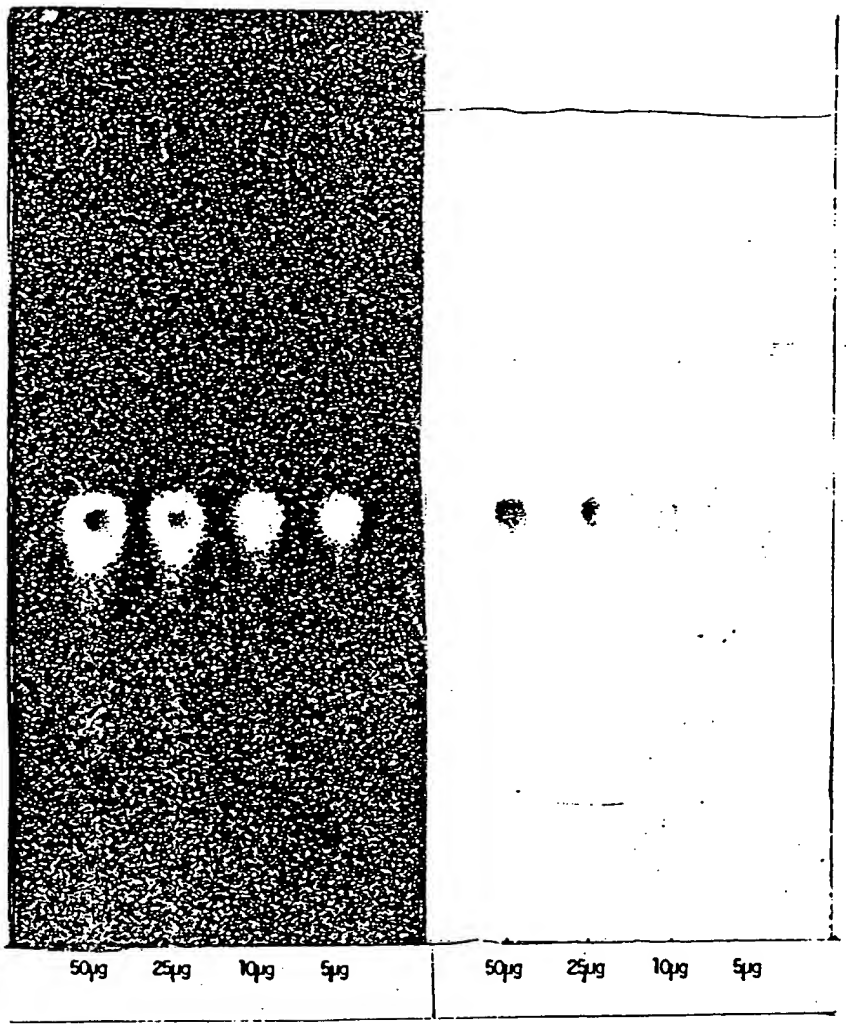
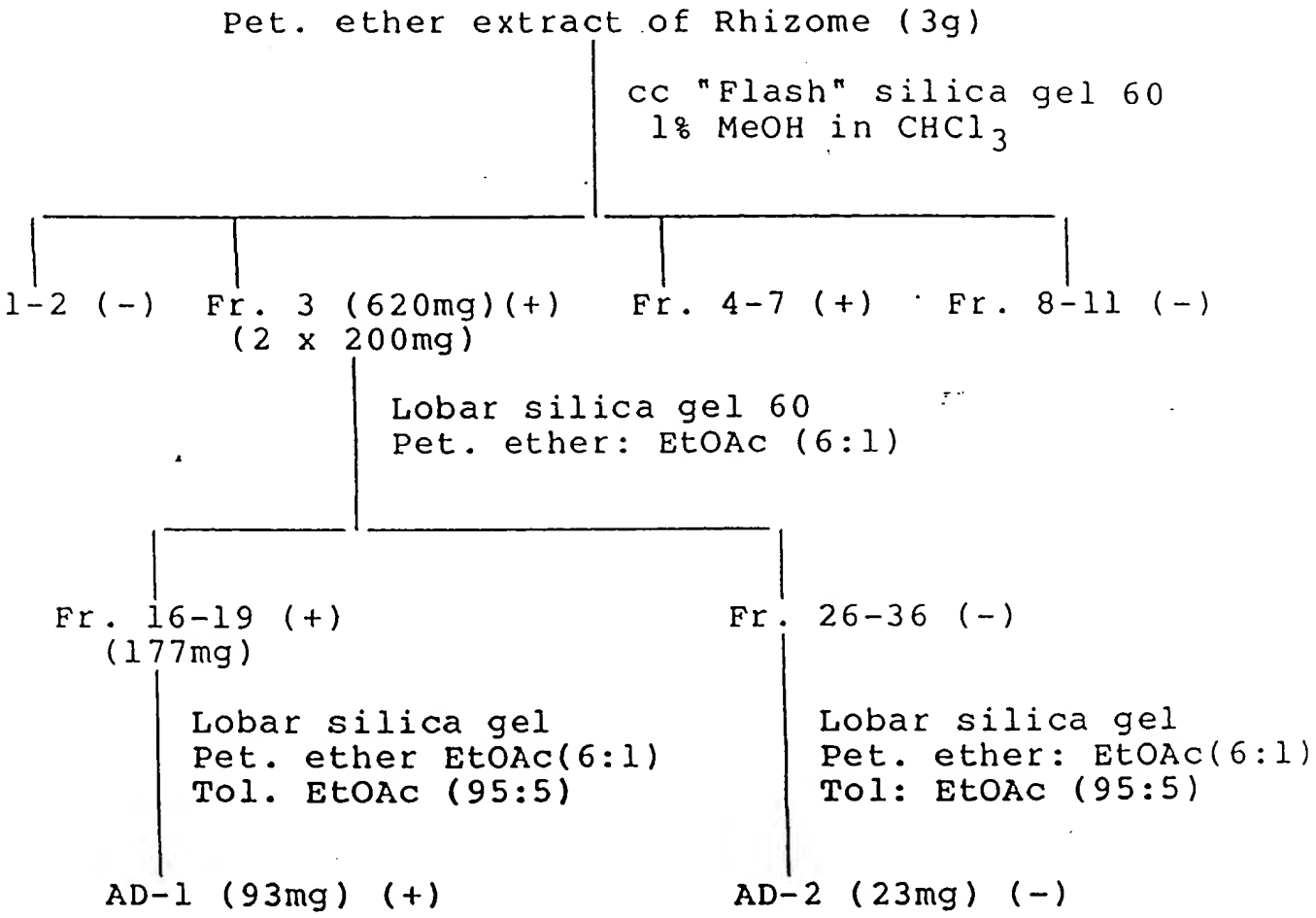


Fig. 2

SCHEME FOR THE ISOLATION OF ANTIFUNGAL CONSTITUENTS OF

<u>Aframomum daniellii</u> K. Schum (Fam. Zingiberaceae)



\+ active

\- inactive

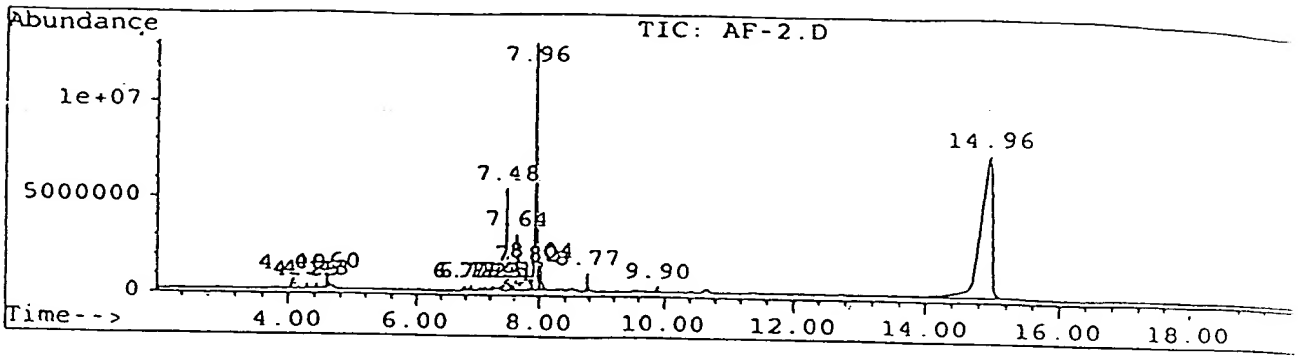


Fig 2A

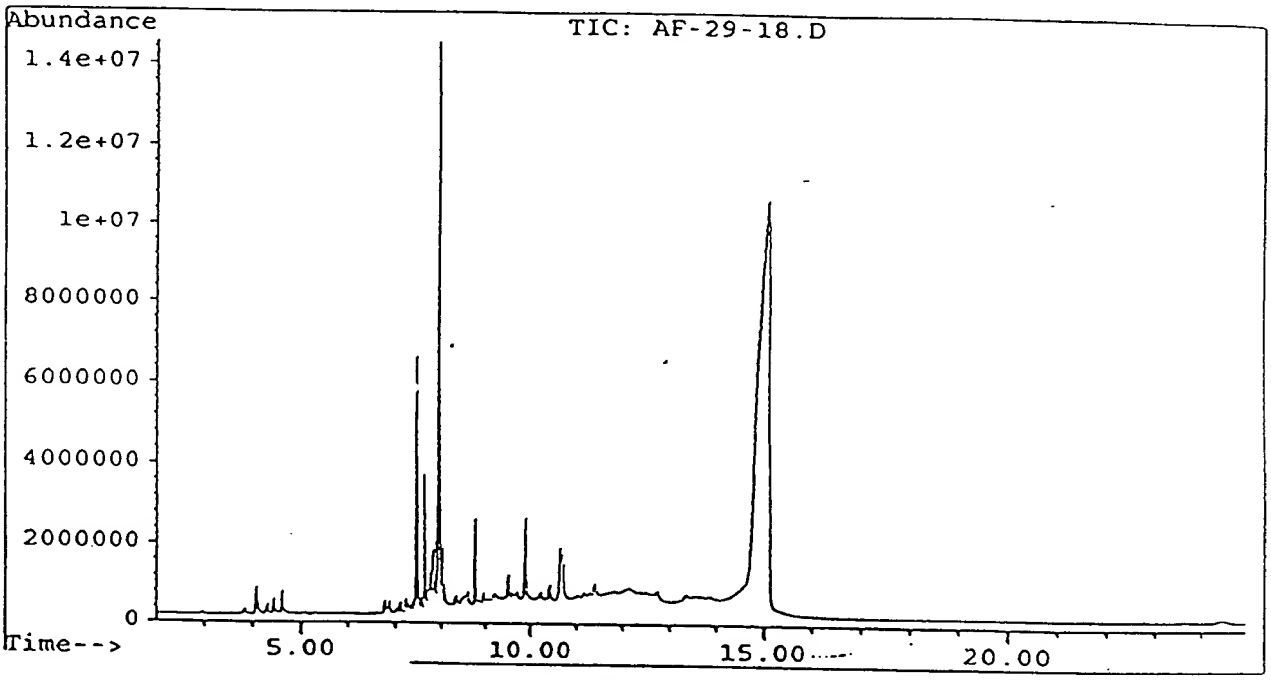


Fig 2B

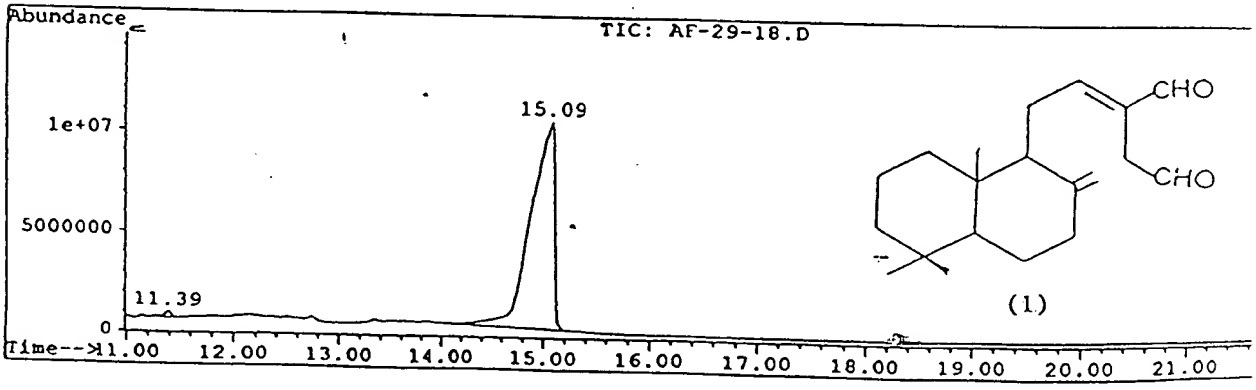


Figure 2C

2D

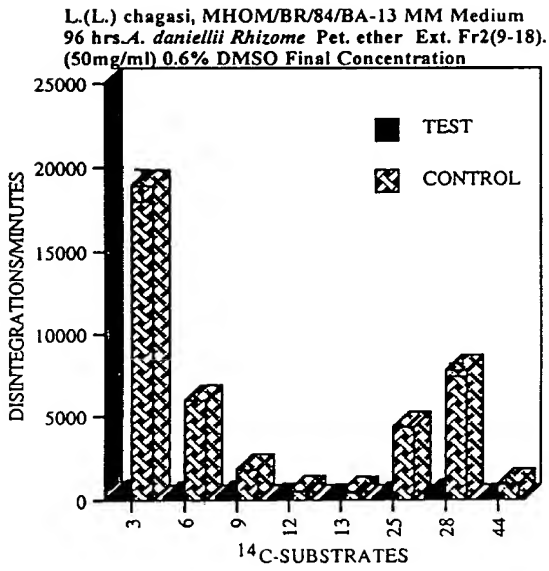


Figure 2D

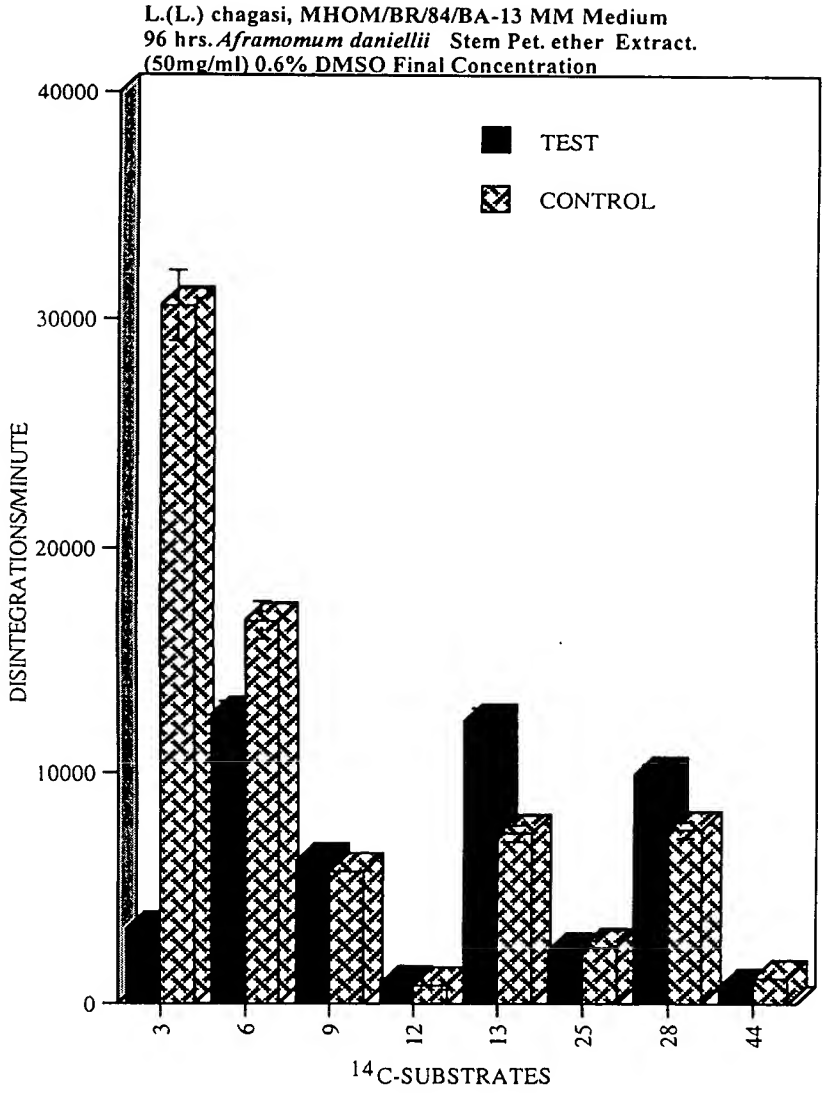
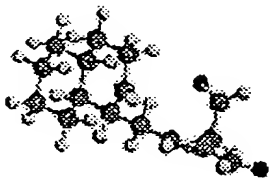


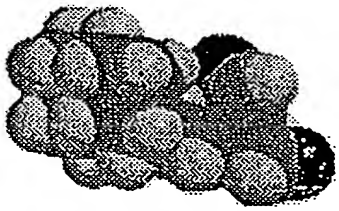
FIGURE 2E

Molecular Representation of Labda-8 (17), 12-diene-15,16- dial

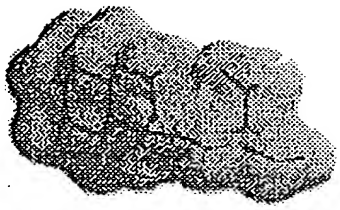
(Diterpene Dialdehyde)



ball & stick model



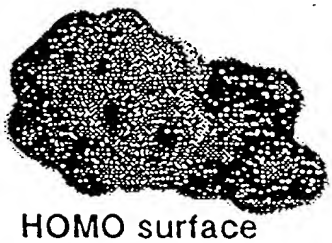
space-filling model



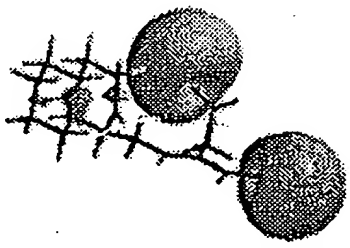
total electron density surface

MEP onto total electron density surface

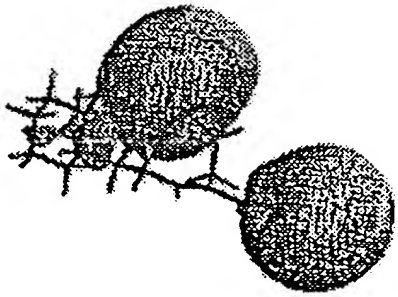
LUMO surface



HOMO surface



Isopotential surface at -10.0 kcal/mol



Isopotential surface at -5.0 kcal/mol

FIG. 2F

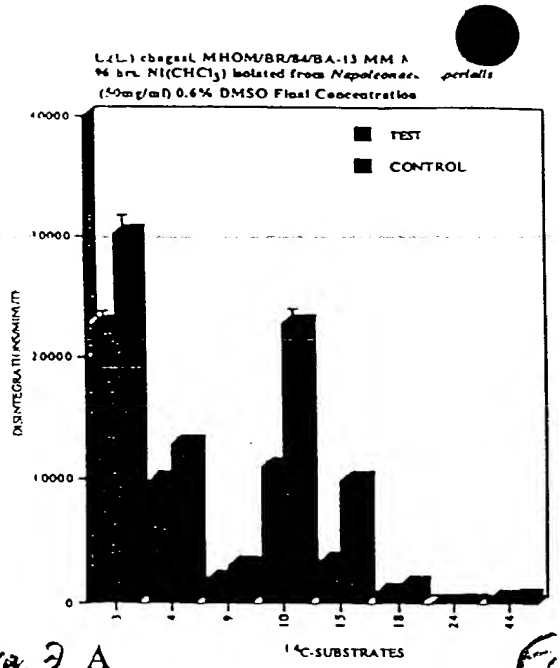


Fig. 3 A

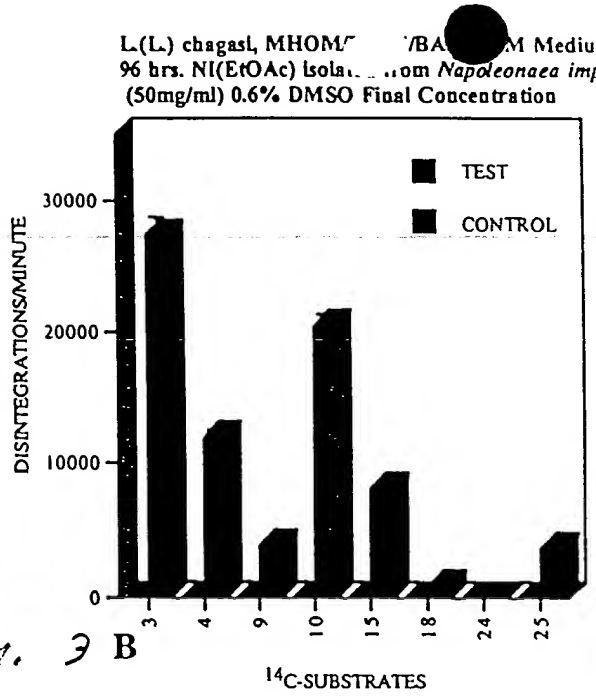


Fig. 3 B

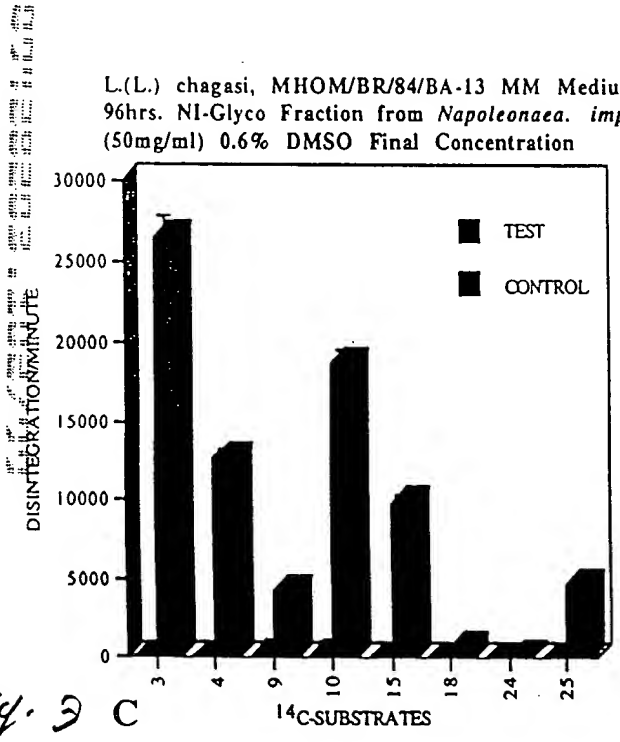


Fig. 3 C

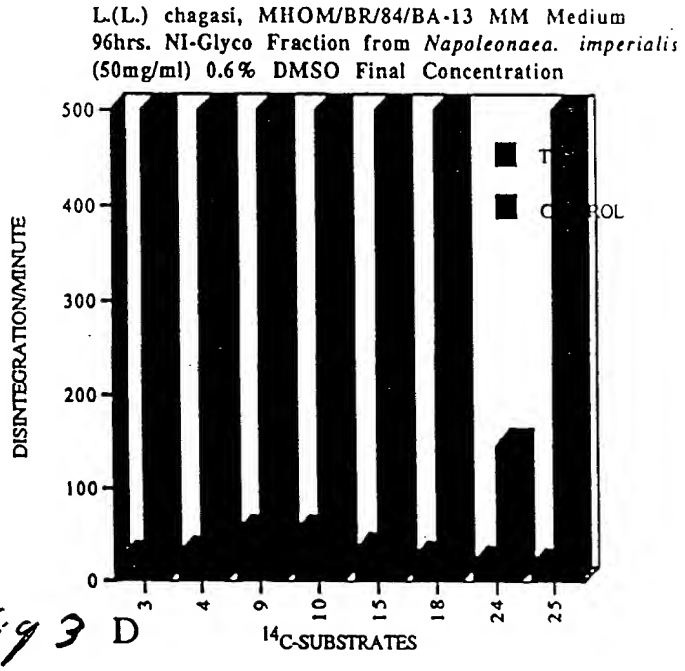


Fig 3 D

Figure 3 Test results from *Napoleonaea imperialis*..
At 50µg/ml suppression of parasite catabolism of 8 of ^{14}C-Substrates occurred

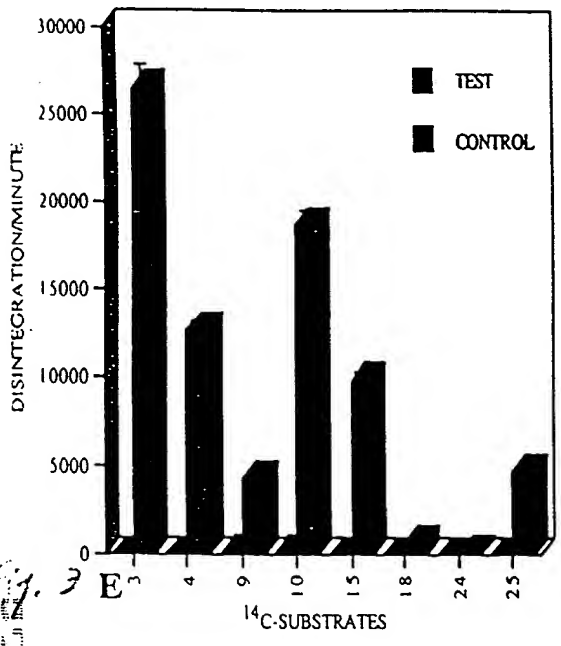


Fig. 3 E

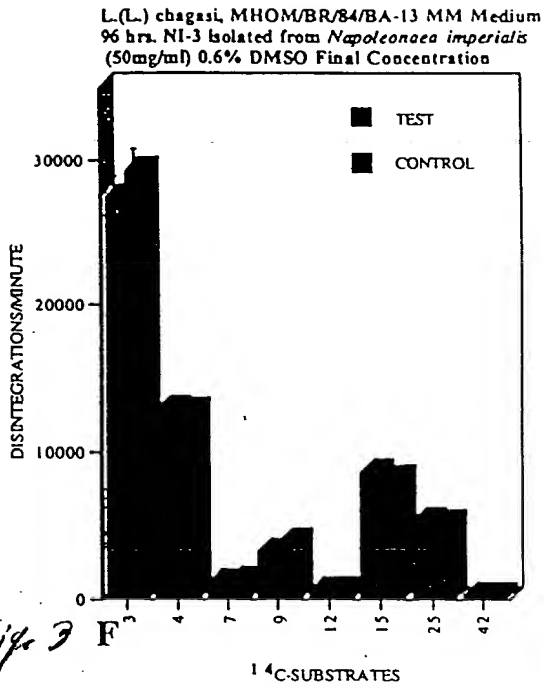


Fig. 3 F

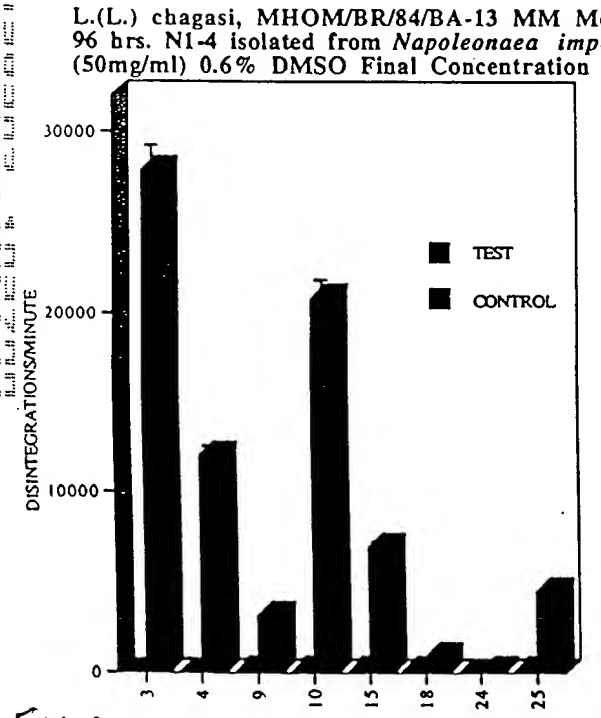


Fig. 3 G

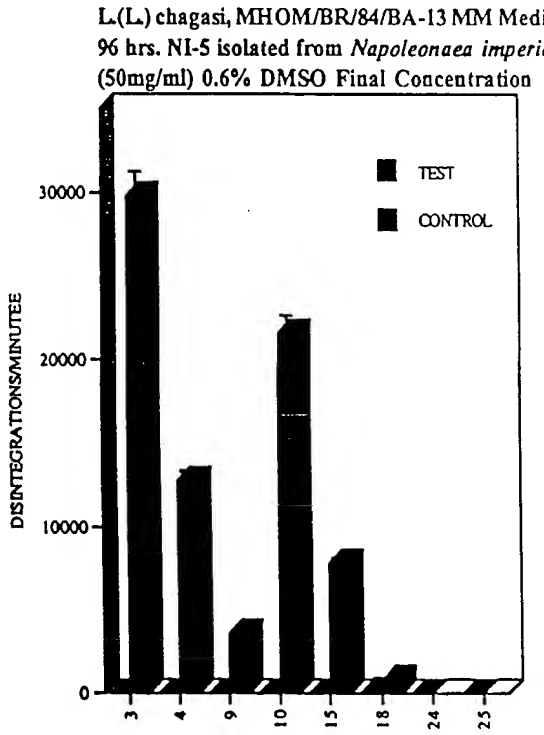


Fig. 3 H

Figure 3 Test results from *Napoleonaea imperialis*..
At 50µg/ml suppression of parasite catabolism of 8 of ^{14}C-Substrates occurred

Data File C:\HPCHEM\1\DATA\O050396C.D Sample Name: E00 60

6"90:10-40"30:70 Water:ACN long C18 column 1.0m
l/min DAD 254nm

Acq. Method	: IRDBAY.M	Seq. Line	: -
Acq. Operator	: dgbg	Vial	: 100
		Inj	: -
Sample Name	: E00 60/45	Inj Volume	: 10 µl

Analysis Method : C:\HPCHEM\1\METHODS\IRDBAY.M
(modified after loading)

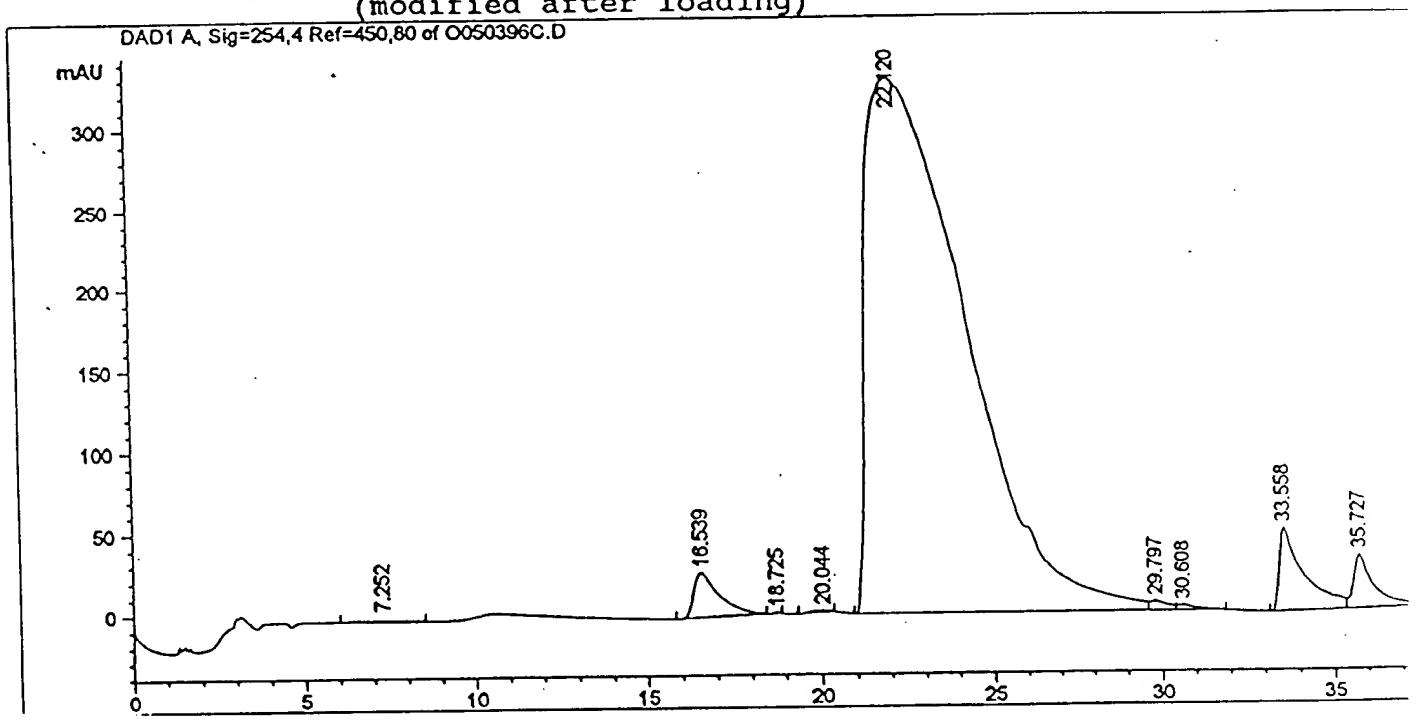


Figure 31 Liquid Chromatographic Separation of Eupatorium odoratum Antileishmanial Fraction E00 60-104.

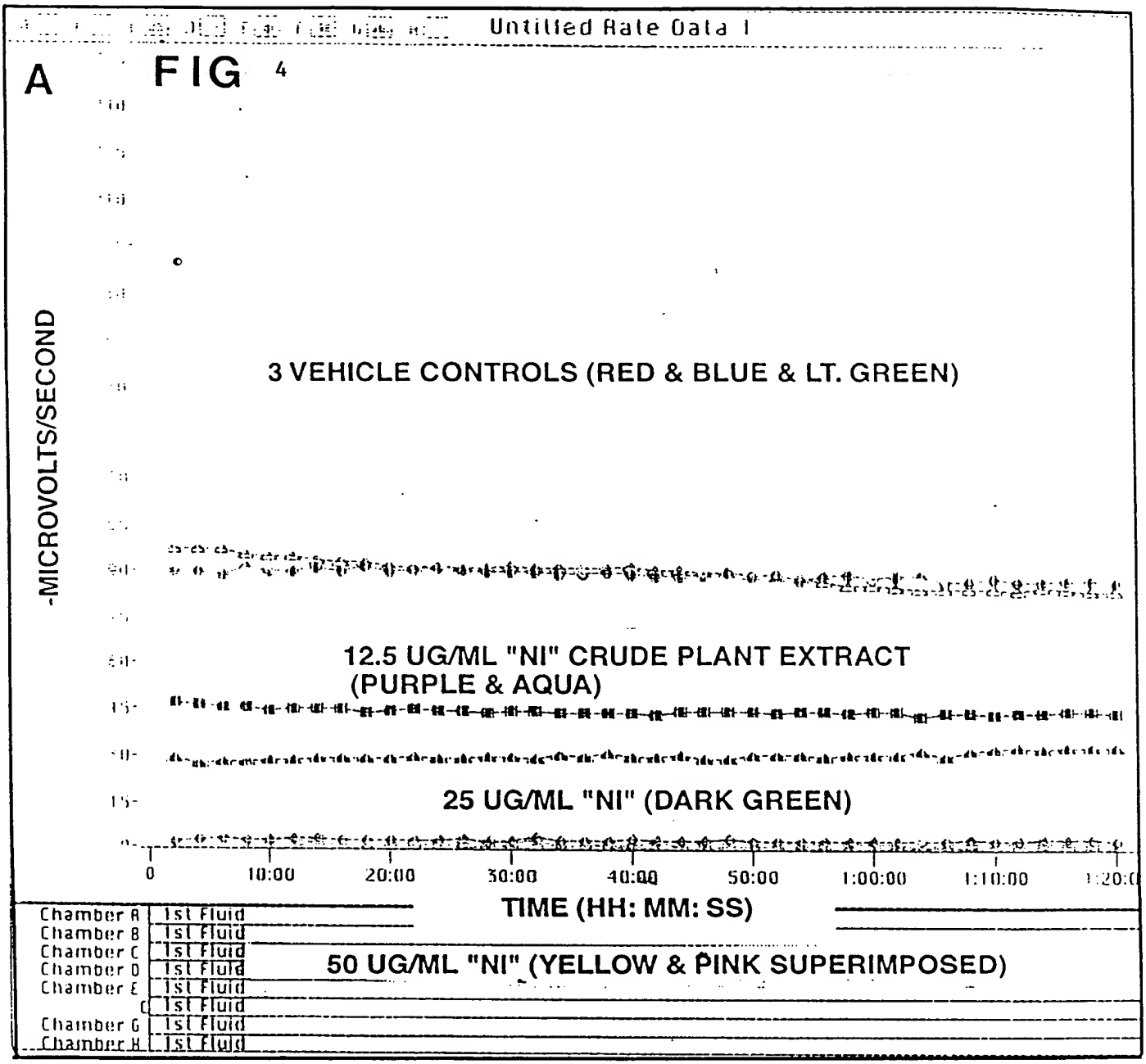

Untitled Rate Data 1
A
FIG 4
-MICROVOLTS/SECOND
3 VEHICLE CONTROLS (RED & BLUE & LT. GREEN)
12.5 UG/ML "NI" CRUDE PLANT EXTRACT
(PURPLE & AQUA)
25 UG/ML "NI" (DARK GREEN)
50 UG/ML "NI" (YELLOW & PINK SUPERIMPOSED)
0
10:00
20:00
30:00
40:00
50:00
1:00:00
1:10:00
TIME (HH: MM: SS)
Chamber A 1st Fluid
Chamber B 1st Fluid
Chamber C 1st Fluid
Chamber D 1st Fluid
Chamber E 1st Fluid
1st Fluid
Chamber G 1st Fluid
Chamber H 1st Fluid

Figure 4A

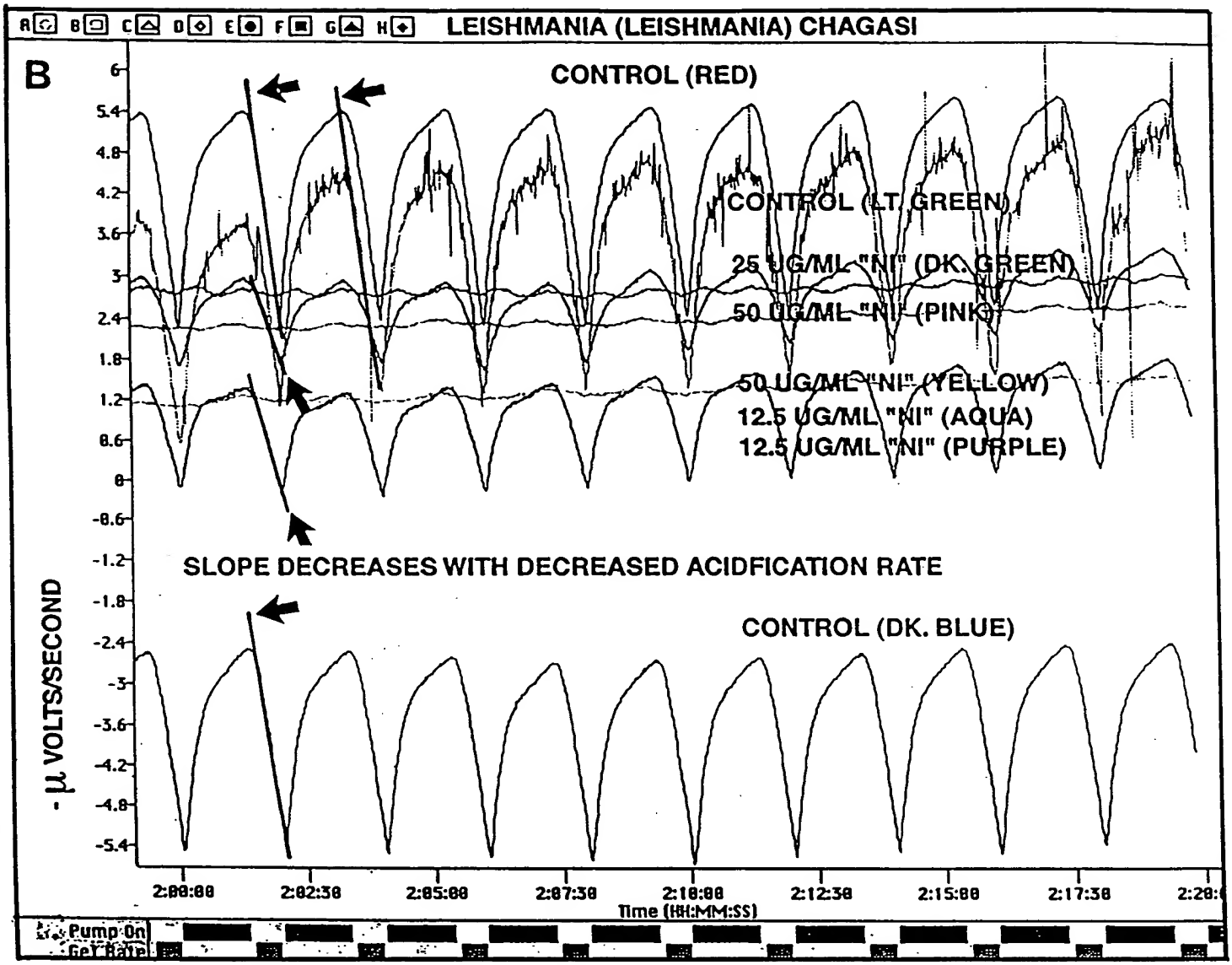


Figure 4B

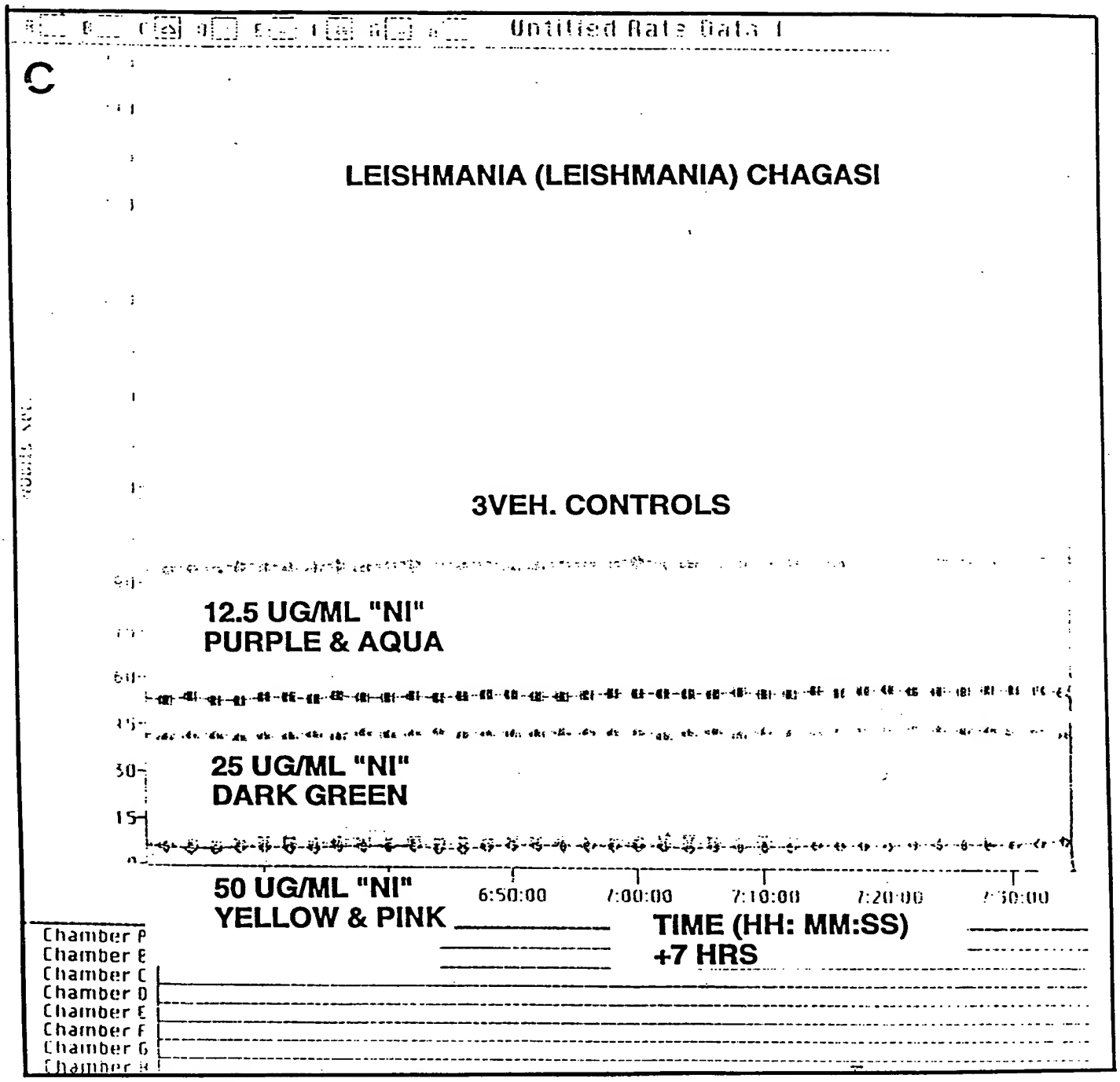
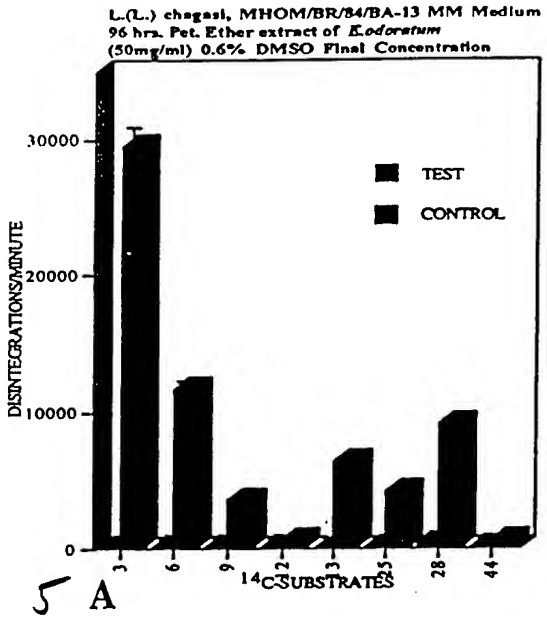
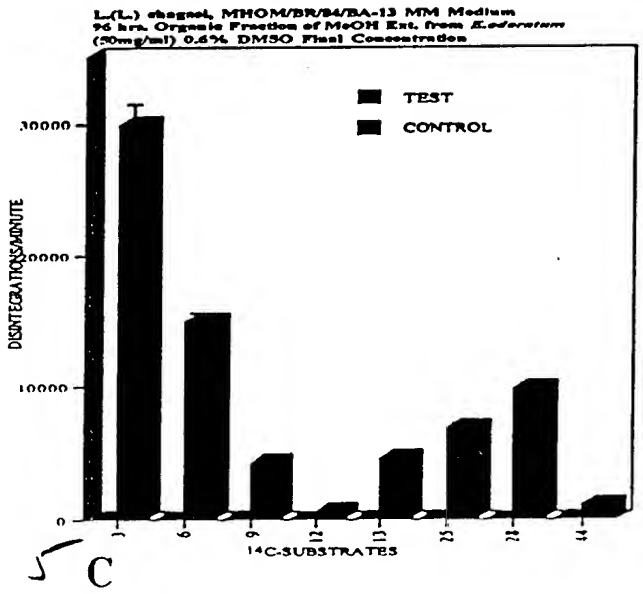


Figure 4C



B



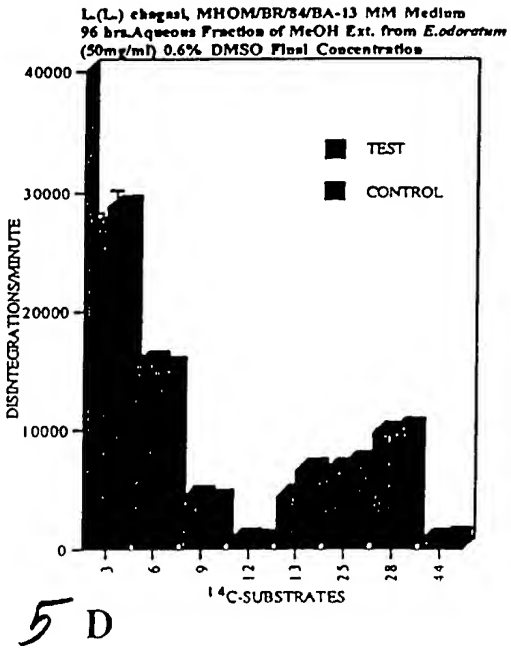


Figure 5

Fig. 5B

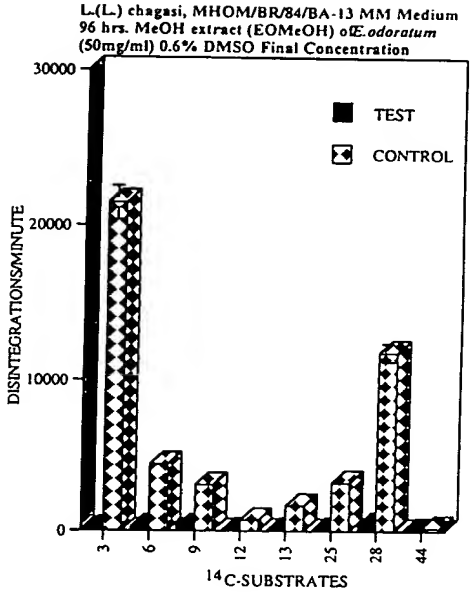
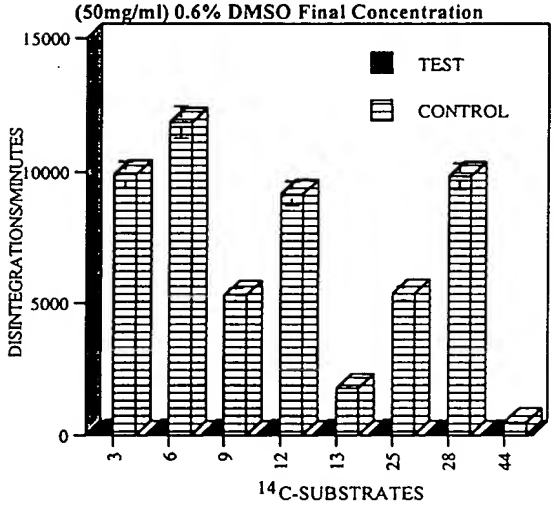
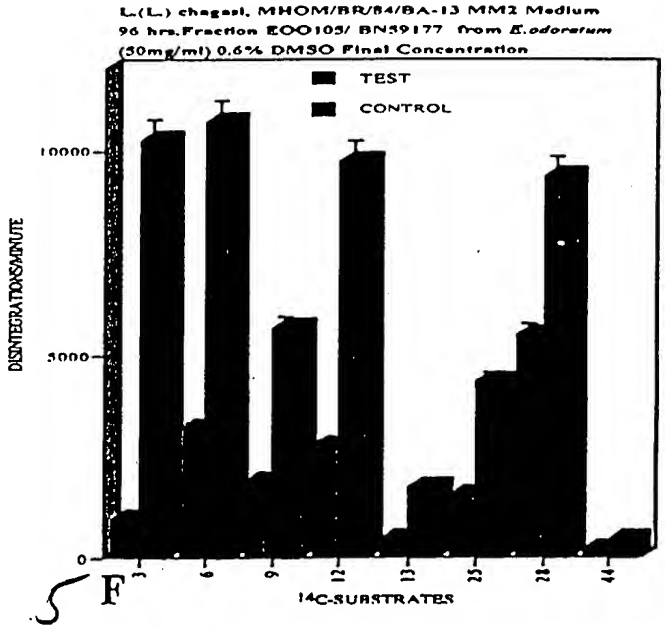


Fig 5E

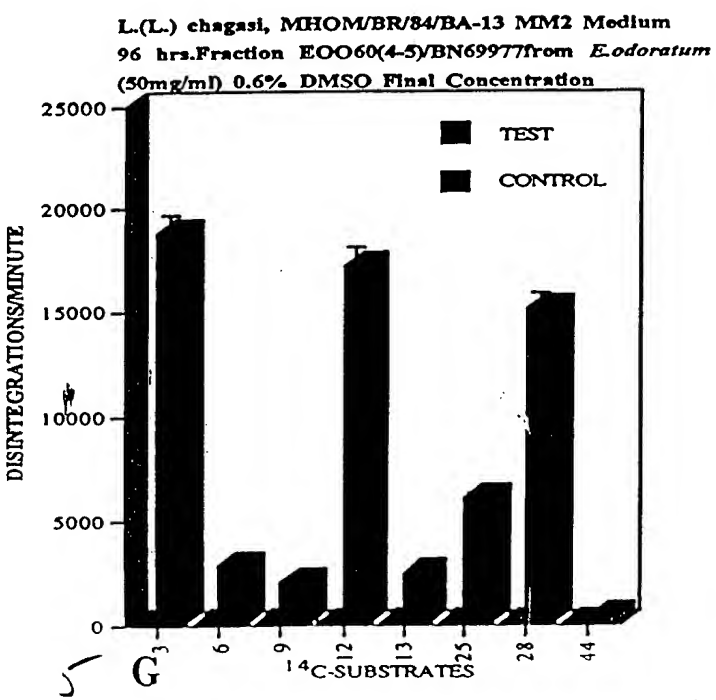
L.(L.) chagasi, MHOM/BR/84/BA-13 MM2 Medium
96 hrs.Fraction EOO60-104/BN59168 from *E.odoratum*
(50mg/ml) 0.6% DMSO Final Concentration



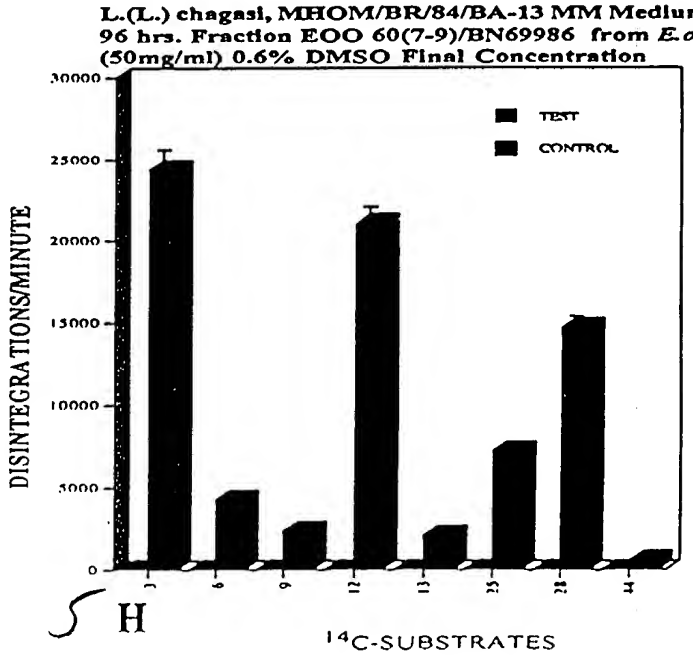


E

F



G



H

Figure 5

Fig. 6

TABLE 1

Numeric code abbreviations of ^{14}C-substrates used for drug tests*

Numeric Code	14C-Substrates+	Commercial Source
2	L-Arginine (guanidino-14C)	A++
3	L-Aspartic Acid (4-14C)	A
4	L-Asparagine (U-14C)	A
5	L-Glutamic Acid (U-14C)	A
6	L-Glutamine (U-14C)	A
7	Glycine (U-14C)	A
9	L-Isoleucine (U-14C)	A
10	L-Leucine (1-14C)	A
12	L-Methionine (1-14C)	A
13	L-Ornithine (1-14C)	A
15	L-Proline (U-14C)	A
17	Taurine (U-14C)	A
18	L-Threonine (U-14C)	A
20	Tyramine (7-14C)	A
24	L-Fucose (1-14C)	A
25	D-Galactose (1-14C)	A
28	D-Mannose (1-14C)	A
42	Orotic Acid (carboxyl-14C)	Nss
44	Succinic Acid (1,4-14C)	N
46	Na-n-Butyric Acid (1-14C)	A
49	D-Glucosamine (1-14C)	A
52	Na-Glycocholic Acid (1-14C)	A
53	L-Methionine (methyl-14C)	A

TABLE 2.

In vitro Antimalarial Activity of Isolated Compounds Against Clones of *Plasmodium falciparum*

Compounds	Plant Source	IC_{50} (µg/ml) W_2 clone	D_6 clone
Labda-8(17),12-diene-15,16-dial (**I**)	*Aframomum daniellii*	96.66	280.18
Sakurenatin (**II**)	*Eupatorium odoratum*	164.95	123.88
Aulacocarpin (**III**)	*Aframomum aulocacarpus*	2224.72	146.72

FIGURE 7

Table 3.

In vitro Activity of Plant Extract vs Growth of African Trypanosomes.

		EATRO 110	KETRI 243	KETRI 269	KETRI 243-As-10 3
Picralima nitida pfr2 SU-367		9.2	15.1	8.4	8.5
Picralima nitida pfr3 SU-369		1.1	6.1	8.2	11
Picralima nitida pfr4 SU-370		64	5	500g/ml-22%	5OOmg/ml-13%
Aframomum melegueta hex SU-766		102	21.5	5OO?g/ml-22%	47
Aframomum aulocacarpus SU-787		9.0	8.5	12.6	14.9
Aframomum melegueta MeOHSU-798		8.4	7.2	15	30
Aframomum melegueta aq SU-813		500µg/ml-38%	500µg/ml-14%	5OOµg/ml-44%	5OOµg/ml-22%
Gongronema latifolium $CHCl_3$ SU-614		134	74	79	51
Gongronema latifolium ext SU-105		5OOµg/ml-16%	500µg/ml-8%	5OOµg/ml-7%	500µg/ml8%
Grape seed2032 SU 719		1.9	2.0	1.6	3.4
Albizia ferruginea hex SU-679		18.0	19.6	28.9	40.55
Uvaria chamae rt DCM SU-799		115	229	114	117
Morinda lucida DCM SU-740		33	32.5	30.0	39.0
Dracaena mannii pDM-X SU-175		6.5	5.4	6.8	6.2
Picralima nitida PNP-2 SU-846		15.0	16.9	18.0	13.5
Picralima nitida PNP-4 SU-847		13.5	8.3	12.5	12.6
Picralima nitida PNP-8 SU-848		14.1	16.0	18.0	15.1
Kigelia africana MeOHSU-769		119	73.0	74	78
Araliopsis tabouensis MeOH frSU-724		6.4	64.0	59	105
Araliopsis tabouensis AT6compd SU1459		500	-	=	=
*Araliopsis tabouensis*AT7compd SU1458		100	-	-	-
Aframomum aulocacarpus (*aulacocarpin)* AZ2 SU-1460		0.86	-	-	-
Dracaena mannii Mannispirostan A SU1461		6.4	-	-	-
Napoleonaea imperialis Su-1462		1.75	-	-	-
Mezoneurum benthamianum SU-1749		44	19.5	18.5	-
	SU-1750	19	76	37	-
Eupatorium odoratum L MeOH SU-1466		50µg/ml	-	-	-
compound sakuranetin	SU-1751	20	20.5	73	-
Gnetum africanum	SU-1752	202	190	225	-
Picralima nitida CompoundBN79508*	SU-1753	-	-	-	-
Plantex vellous	SU-1756	75	18.5	13.5	-
Plantex vellous	SU-1757	1.5	-	13	-
Fagara lemairei	SU-1758	2.2	2	2.05	-
Fagara lemairei	SU-1759	20.5	170	130	-
Erythrina senegalensis	SU-1760	7.2	9.1	15.5	-
Erythrina senegalensis	SU-1761	18.9	20	22	-
Mitracarpus scaber	SU-1762	98	105	71	-
Olax viride	SU-1763	195	32%@ 500µg/ml	235	-
Chasmanthera dependens.	SU-1764	225	225	-	-
Glossocalyx brevipes ext	SU-1464	0.77	-	-	
Glossocalyx brevipes Neutral fraction	SU-1768	0.78	0.76	0.715	-

FIGURE 8

Dorsternia barteri	SU-1769	7.5	7.3	15.25	-
	SU-1770	16.5	19.5	16	-
	SU-1771	54	60	-	-
	SU-1772	50	47	-	-
Garcinia kola Heckel	SU-1773	210	210	-	-
Pentamidine		0.00048	0.00186	0.00192	0.003
Melarsen Oxide		0.00077	0.0025	0.0066	0.0072

(-) = not tested
SU = Submitter number.

FIGURE 8 Continued

Fig. 9

Table 4

Minimum Inhibitory concentration (MIC) of Plant Extracts against Trichomonas vaginalis strain CI-NIH

		MIC (mg/ml)		
		CI-NIH	CDC-085	KV-1
	Lab. No	48 hrs	48 hrs	48 hrs
Gongronema latifolium	SU-105	>2.50	2.50	2.50
Dracaena mannii	SU-175	2.50	2.50	2.50
Picralima nitida	SU-367	12.50	12.50	0.78
Picralima nitida	SU-369	0.62	1.25	1.25
Picralima nitida	SU-370	2.50	2.50	2.50
Gongronema latifolium CHCl3	SU-614	1.25	0.62	1.25
Albizia ferruginea hex	SU-679	0.62	0.62	0.62
Grape fruit seed 2032	SU-719	0.31	0.01	0.15
Araliopsis tabouensis MeOH fr	SU-724	0.62	0.62	2.50
Morinda lucida DCM	SU -740	1.25	1.25	1.25
Aframomum melegueta hex	SU-766	1.25	1.25	2.50
Kigelia africana MeOH	SU-769	0.31	0.62	0.62
Aframomum melegueta CHCl3	SU-787	0.62	1.25	2.50
Aframomum melegueta MeOH	SU-798	1.25	0.62	.25
Uvaria chamae rt DCM	SU-799	0.15	0.31	0.62
Aframomum melegueta aqueous	SU-813	2.50	2.50	0.15
Picralima nitida PNP-2	SU-846	2.50	1.25	2.50
Picralima nitida PNP-4	SU-847	2.50	2.50	2.50
Picralima nitida PNP-8	SU-848	2.50	2.50	2.50
Metronidazole		0.003	0.40	0.004